ELSEVIER

Forest Ecology and Management 68 (1994) 417–419

Forest Ecology and Management

Contents of *Forest Ecology and Management*, Volume 68

VOL. 68 NO. 1 — SEPTEMBER 1994

Preface

Experimental manipulations of biota and biogeochemical cycling in forest ecosystems
L. Rasmussen (Lyngby, Denmark) and E.P. Farrell (Dublin, Ireland) 1

A comparison of sites in the EXMAN project, with respect to atmospheric deposition and the chemical composition of the soil solution and foliage
E.P. Farrell, T. Cummins, J.F. Collins (Dublin, Ireland), C. Beier (Lyngby, Denmark), K. Blanck, M. Bredemeier (Göttingen, Germany), P.H.B. De Visser (Wageningen, Netherlands), K. Kreutzer (Freising-Weihenstephan, Germany), L. Rasmussen (Lyngby, Denmark), A. Rothe and N. Steinberg (Freising-Weihenstephan, Germany) 3

Biological response of five forest ecosystems in the EXMAN project to input changes of water, nutrients and atmospheric loads
P.H.B. De Visser (Wageningen, Netherlands), C. Beier, L. Rasmussen (Lyngby, Denmark), K. Kreutzer, N. Steinberg (Freising-Weihenstephan, Germany), M. Bredemeier, K. Blanck (Göttingen, Germany), E.P. Farrell and T. Cummins (Dublin, Ireland) 15

Canopy nutrient content of a *Quercus ilex* L. forest: fertilization and irrigation effects
S. Sabaté and C.A. Gracia (Barcelona, Spain) 31

Soil and vegetation responses to decreased atmospheric nitrogen and sulphur inputs into a Scots pine stand in the Netherlands
A.W. Boxman, H.F.G. Van Dijk and J.G.M. Roelofs (Nijmegen, Netherlands) 39

Effects of whole catchment liming and Mg addition on soil water and runoff at two forested watersheds in the Black Forest (Germany)
G. Brahmer (Freiburg, Germany) 47

Response of the West Bear Brook Watershed, Maine, USA, to the addition of $(NH_4)_2SO_4$: 3-year results
S.A. Norton, J.S. Kahl, I.J. Fernandez, L.E. Rustad, J.P. Scofield and T.A. Haines (Orono, ME, USA) 61

Effects of sewage-water spraying on mineral cycling in a forest ecosystem
G. Iwatsubo (Kyoto, Japan) and Y. Nagayama (Matsue, Japan) 75

The Adirondack Manipulation and Modeling Project (AMMP): design and preliminary results
M.J. Mitchell, C.T. Driscoll (Syracuse, NY, USA), J.H. Porter (Grahamsville, NY, USA), D.J. Raynal (Syracuse, NY, USA), D. Schaefer (San Juan, Puerto Rico) and E.H. White (Syracuse, NY, USA) 87

Potential denitrification and N_2O formation in dry European coniferous forest soils
T. Nielsen, A. Kjøller and S. Struwe (Copenhagen, Denmark) 101

The effectiveness of catchment liming in restoring acid waters at Loch Fleet, Galloway, Scotland
T.R.K. Dalziel (Nottingham, OEE, UK), E.J. Wilson and M.V. Proctor (Leatherhead, UK) 107

Effects of irrigation and fertilization on stem diameter growth in a Mediterranean holm oak forest
X. Mayor and F. Rodà (Bellaterra, Spain) 119

VOL. 68 NOS. 2–3 — OCTOBER 1994

Resistance and resilience in a directly regenerating rainforest: Nicaraguan trees of the Vochysiaceae after Hurricane Joan

D.H. Boucher (Frostburg, MD, USA), J.H. Vandermeer (Ann Arbor, MI, USA), M.A. Mallona (Managua, Nicaragua), N. Zamora (Heredia, Costa Rica) and I. Perfecto (Ann Arbor, MI, USA) 127
Height growth pattern of white spruce in relation to site quality
G.G. Wang (Winnipeg, Man., Canada), P.L. Marshall and K. Klinka (Vancouver, B.C., Canada) 137
Leaf-level responses to light and temperature in two co-occurring *Quercus* (Fagaceae) species: implications for tree distribution patterns
E.P. Hamerlynck and A.K. Knapp (Manhattan, KS, USA) 149
The growth response of sclerophyllous *Eucalyptus* species to SO_2 exposure compared with *Pinus radiata*
S.A. Wilson and F. Murray (Murdoch, W.A., Australia) 161
Effects of site preparation on root zone soil water regimes in high-elevation forest clearcuts
R.L. Fleming (Sault Ste. Marie, Ont., Canada), T.A. Black (Vancouver, B.C., Canada) and N.R. Eldridge (Saint-Foy, Que., Canada) 173
Using individual tree growth projection models to estimate stand-level gains attributable to genetically improved stock
D.A. Hamilton, Jr. and G.E. Rehfeldt (Moscow, ID, USA) 189
Growth and self-thinning in two young Scots pine stands planted at different initial densities
U. Nilsson (Alnarp, Sweden) and A. Albrektson (Umeå, Sweden) 209
Economic and political feasibility of international carbon offsets
K. Brown and W.N. Adger (Norwich, UK) 217
Decomposition of leaf litter in an Appalachian forest: effects of leaf species, aspect, slope position and time
D.A. Mudrick (Morgantown, WV, USA), M. Hoosein (Georgetown, Guyana), R.R. Hicks, Jr. and E.C. Townsend (Morgantown, WV, USA) 231
Effects of clearcutting and soil mixing on soil properties and understorey biomass in western red cedar and western hemlock forests on northern Vancouver Island, Canada
R.J. Keenan (Vancouver, B.C., Canada), C. Messier (Montreal, Que., Canada) and J.P.H. Kimmins (Vancouver, B.C., Canada) 251
Effects of thinning in a 43-year-old Douglas-fir stand on above- and below-ground biomass allocation and leaf structure of understory *Gaultheria shallon*
C. Messier (Montréal, Que., Canada) and A.K. Mitchell (Victoria, B.C., Canada) 263
Establishment of six tree species on deep-tilled minesoil during reclamation
B. Cleveland and R. Kjelgren (Carbondale, IL, USA) 273
Potential conflicts between timber supply and habitat protection in the boreal mixedwood of Alberta, Canada: a simulation study
S.G. Cumming, P.J. Burton, S. Prahacs and M.R. Garland (Vancouver, B.C., Canada) 281
Management strategies for forest insect defoliators in British Columbia
R.F. Shepherd (Victoria, B.C., Canada) 303
Modeling individual tree growth using temporary plot records: evaluation of a non-parametric diameter distribution based method
T.D. Droessler and T.E. Burk (St. Paul, MN, USA) 325
^{15}N-Labelled urea fertilization of a tamarack/black spruce mixed stand on a drained minerotrophic peatland: ^{15}N in soil and tree uptake
A.G. Mugasha (Morogoro, Tanzania) and D.J. Pluth (Edmonton, Alta., Canada) 339
Distribution and recovery of ^{15}N-urea in a tamarack/black spruce mixed stand on a drained minerotrophic peatland
A.G. Mugasha (Morogoro, Tanzania) and D.J. Pluth (Edmonton, Alta., Canada) 353
Comparison of the performance of line sampling to other forms of cluster sampling
C. Kleinn (Freiburg, Germany) 365
Climate, soils and *Cephalcia arvensis* outbreaks on *Picea abies* in the Italian Alps
C. Marchisio (Pinerolo, Italy), A. Cescatti and A. Battisti (Padova, Italy) 375
Conservation of biodiversity in alluvial hardwood forests of the temperate zone. The example of the Rhine valley
A. Schnitzler (Illkirch, France) 385
Responses of *Casuarina equisetifolia* to inoculation with *Glomus fasciculatum* and/or *Frankia*
M. Vasanthakrishna, D.J. Bagyaraj and P.J. Nirmalnath (Bangalore, India) 399

Short Communication

Responses of *Casuarina equisetifolia* to inoculation with *Glomus fasciculatum* and/or *Frankia*
M. Vasanthakrishna, D.J. Bagyaraj and P.J. Nirmalnath (Bangalore, India) 399

Book Reviews

The genetics of Scots pine 403
Balancing environmental issues in forestry 404
Management of nutrition in forests under stress 405
The forest as physiognomic form 406
Tropical forests and their crops 407

Author Index 409

Subject Index 411